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Attest



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**United States Patent** [19]

Nishimura

[11] **Patent Number:** 5,831,944[45] **Date of Patent:** Nov. 3, 1998

[54] **MAGNETOOPTICAL RECORDING MEDIUM AND METHOD FOR REPRODUCING INFORMATION FROM A MAGNETOOPTICAL RECORDING MEDIUM HAVING THREE LAYERS**

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**Related U.S. Application Data**

[63] Continuation of Ser. No. 389,579, Feb. 15, 1995, abandoned, which is a continuation-in-part of Ser. No. 111,974, Aug. 26, 1993, abandoned.

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[58] **Field of Search** ..... 369/13, 14, 275.3,  
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**ABSTRACT**

A magneto-optical recording medium has a first magnetic layer which is an in-plane magnetization film at both room temperature and high temperatures and changed to a perpendicular magnetization film at intermediate temperatures, and a second magnetic layer which is composed of a perpendicular magnetization film. The recording medium enables realization of high S/N reproduction of information recorded at a pitch below the diffraction limit of light with a simple structure, and further improvement in linear recording density and track density.

**2 Claims, 14 Drawing Sheets**